# AT A REGULAR MEETING OF THE BOARD OF SUPERVISORS OF ROANOKE COUNTY, VIRGINIA, HELD AT THE ROANOKE COUNTY ADMINISTRATION CENTER ON TUESDAY, AUGUST 22, 2006

# ORDINANCE <u>082206-3</u> CHAPTER 8.1 "EROSION AND SEDIMENT CONTROL" OF THE ROANOKE COUNTY CODE TO ADDRESS STEEP SLOPE DEVELOPMENT AND OTHER TECHNICAL AMENDMENTS

WHEREAS, in 2005 the Roanoke County Board of Supervisors adopted revisions to the Roanoke County Community Plan which suggest developing guidelines and regulations for steep slope development; and

WHEREAS, Roanoke County Community Development staff researched slope development ordinances from across the United States and interviewed experts in the fields of geology, civil engineering, geotechnical engineering and urban planning; and

WHEREAS, on July 10, 2006, the Roanoke County Planning Commission adopted a resolution recommending that the Board of Supervisors adopt these amendments to Chapter 8.1 of the Roanoke County Code; and

WHEREAS, on July 25, 2006, the Roanoke County Planning Commission and Board of Supervisors met in work session with County staff to review the proposed amendments; and

WHEREAS, the first reading of this ordinance was held on August 8, 2006, and the second reading was held on August 22, 2006.

NOW, THEREFORE, be it ordained by the Board of Supervisors of Roanoke County as follows:

1. That Chapter 8.1 "Erosion and Sediment Control" be amended to read and provide as follows:

## [NOTE: Slope Amendments: Yellow Highlight DCR Required Amendments: Strikethrough and red text]

#### Chapter 8.1

### **EROSION AND SEDIMENT CONTROL AND STEEP SLOPE DEVELOPMENT**

### Sec. 8.1-1. Title, purpose and authority.

This chapter shall be known as the "Erosion and Sediment Control and Steep Slope Development Ordinance of the County of Roanoke, Virginia." The purpose of this chapter is to conserve the land, water, air and other natural resources of the county by establishing requirements for the control of erosion and sedimentation, and by establishing requirements for development of steep slopes, and by establishing procedures whereby these requirements shall be administered and enforced.

This Chapter is authorized by the <u>Code of Virginia</u>, Title 10.1, Chapter 5, Article 4 (Sec. 10.1-560 et seq.), known as the Virginia Erosion and Sediment Control Law.

\* \* \* \*

#### Sec. 8.1-3. Definitions.

As used in this chapter, unless the context requires a different meaning:

Agreement in lieu of a plan means a contract between the plan-approving authority and the owner which specifies conservation measures which must be implemented in all construction disturbing between two thousand five hundred (2,500) square feet and five thousand (5,000) square feet and/or two hundred fifty (250) to five hundred (500) cubic yards; this contract may be executed by the plan-approving authority in lieu of a formal site plan.

Applicant means any person submitting an erosion and sediment control plan for approval or requesting the issuance of a permit, when required, authorizing land-disturbing activities to commence.

Board means the state soil and water conservation board.

Certified inspector means an employee or agent of a program authority who holds a certificate of competence from the board in the area of project inspection.

Certified plan reviewer means an employee or agent of a program authority who:

(1) Holds a certificate of competence from the board in the area of plan review;

(2) Is licensed as a professional engineer, architect, certified landscape architect or land surveyor pursuant to article 1 (Code of Virginia, § 54.1-400 et seq.) of chapter 4 of title 54.1.

Certified program administrator means an employee or agent of a program authority who holds a certificate of competence from the board in the area of program administration.

Clearing means any activity which removes the vegetative ground cover including, but not limited to, root mat removal or top soil removal.

Conservation plan, erosion and sediment control plan or plan means a document containing material for the conservation of soil and water resources of a unit or group of units of land. It may include appropriate maps, an appropriate soil and water plan inventory, and management information with needed interpretations and a record of decisions contributing to conservation treatment. The plan shall contain all major conservation decisions to assure that the entire unit or units of land will be so treated to achieve the conservation objectives.

County means the County of Roanoke.

Denuded means a term applied to land that has been physically disturbed and no longer supports vegetative cover.

Department means the department of conservation and recreation.

Development means a tract of land developed or to be developed as a single unit under single ownership or unified control which is to be used for any business or industrial purpose or is to contain three (3) or more residential dwelling units.

Director means the director of community development or his assignee.

District or soil and water conservation district refers to the Blue Ridge Soil and Water Conservation District.

Dormant refers to denuded land that is not actively being brought to a desired grade or condition.

Erosion impact area means an area of land not associated with current land disturbing activity but subject to persistent soil erosion resulting in the delivery of sediment onto neighboring properties or into state waters. This definition shall not apply to any lot or parcel of land of ten thousand (10,000) square feet or less used for residential purposes.

Excavating means any digging, scooping or other methods of removing earth materials.

Filling means any depositing or stockpiling of earth materials.

Geotechnical Report means a report provided at the applicant's expense, prepared and stamped by a Professional Engineer, that communicates site conditions, and recommends design and construction methods.

- (1) The Geotechnical Report shall include any or all of the following basic information, as determined by the Professional Engineer:
  - Summary of all subsurface exploration data, including subsurface soil profile, exploration logs, laboratory or in situ test results, and ground water information;
  - b) Interpretation and analysis of the subsurface data;
  - c) Specific engineering recommendations for design;
  - d) Discussion of conditions for solution of anticipated problems; and
  - e) Recommended geotechnical special provisions.
- For guidance in investigating site conditions and preparing geotechnical reports, the Professional Engineer may refer to all applicable sections of: "Checklist and Guidelines for Review of Geotechnical Reports and Preliminary Plans and Specifications", US Department of Transportation, Federal Highway Administration Publication No. FHWA ED-88-053, as amended.
- (3) The Geotechnical Report shall be submitted to the plan-approving authority and included in site development files prior to issuance of a land disturbing permit.

Grading means any excavating or filling of earth material or any combination thereof, including the land in its excavated or filled conditions.

Land-disturbing activity means any land change which may result in soil erosion from water or wind and the movement of sediments into state waters or onto lands in the commonwealth, including, but not limited to, clearing, grading, excavating, transporting and filling of land, except that the term shall not include:

- (1) Minor land-disturbing activities such as home gardens and individual home landscaping, repairs and maintenance work;
- (2) Individual service connections;
- (3) Installation, maintenance, or repairs of any underground public utility lines when such activity occurs on an existing hard-surfaced road, street or sidewalk provided such land-disturbing activity is confined to the area of the road, street or sidewalk which is hard-surfaced;

- (4) Septic tank lines or drainage fields unless included in an overall plan for land-disturbing activity relating to construction of the building to be served by the septic tank system;
- (5) Surface or deep mining;
- (6) Exploration or drilling for oil and gas including the well site, roads, feeder lines, and off-site disposal areas;
- (7) Tilling, planting, or harvesting of agricultural, horticultural, or forest crops, or livestock feedlot operations; including engineering operations as follows: construction of terraces, terrace outlets, check dams, desilting basins, dikes, ponds, ditches, strip cropping, lister furrowing, contour cultivating, contour furrowing, land drainage, and land irrigation; however, this exception shall not apply to harvesting of forest crops unless the area on which harvesting occurs is reforested artificially or naturally in accordance with the provisions of chapter 11 (Code of Virginia § 10.1-1100 et seq.) of this title or is converted to bona fide agricultural or improved pasture use as described in subsection B of Code of Virginia § 10.1-1163;
- (8) Repair or rebuilding of the tracks, rights-of-way, bridges, communication facilities and other related structures and facilities of a railroad company;
- (9) Agricultural engineering operations including but not limited to the construction of terraces, terrace outlets, check dams, desilting basins, dikes, ponds not required to comply with the Dam Safety Act, article 2 (§ 10.1-604 et seq.) of chapter 6 of the Code of Virginia, ditches, strip cropping, lister furrowing, contour cultivating, contour furrowing, land drainage, and land irrigation;
- (10) Disturbed land areas for all uses of less than two thousand five hundred (2,500) square feet and/or less than two hundred fifty (250) cubic yards in size:
- (11) Installation of fence and sign posts or telephone and electric poles and other kinds of posts or poles;
- (12) Emergency work to protect life, limb or property, and emergency repairs; provided that if the land- disturbing activity would have required an approved erosion and sediment control plan, if the activity were not an emergency, then the land area disturbed shall be shaped and stabilized in accordance with the requirements of the plan-approving authority.

Land disturbing permit means a permit issued by the county for the clearing, filling, excavating, grading, transporting of land or for any combination thereof or for any purpose set forth herein.

Local erosion and sediment control program or program means an outline of the various methods employed by the county to regulate land-disturbing activities and thereby minimize erosion and sedimentation in compliance with the state program and may include such items as local ordinances, policies and guidelines, technical materials, inspection, enforcement, and evaluation.

Owner means the owner or owners of the freehold of the premises or lesser estate therein, a mortgagee or vendee in possession, assignee of rents, receiver, executor, trustee, lessee or other person, firm or corporation in control of a property.

Permittee means the person to whom the permit authorizing land-disturbing activities is issued or the person who certifies that the approved erosion and sediment control plan will be followed.

*Person* means any individual, partnership, firm, association, joint venture, public or private corporation, trust, estate, commission, board, public or private institution, utility, cooperative, county, city, town or other political subdivision of the commonwealth, any interstate body, or any other legal entity.

Plan-approving authority means the department of community development which is responsible for determining the adequacy of a conservation plan submitted for land-disturbing activities on a unit or units of lands and for approving plans.

Post-development refers to conditions that may be reasonably expected or anticipated to exist after completion of the land development activity on a specific site or tract of land.

*Pre-development* refers to conditions at the time the erosion and sediment control plan is submitted to the plan-approving authority. Where phased development or plan approval occurs (preliminary grading, roads and utilities, etc.), the existing conditions at the time the erosion and sediment control plan for the initial phase is submitted for approval shall establish pre-development conditions.

Program authority means the county which has adopted a soil erosion and sediment control program approved by the board.

Responsible land disturber means an individual from the project or development team, who will be in charge of and responsible for carrying out a land-disturbing activity covered by an approved plan or agreement in lieu of a plan, who:

(1) Holds a responsible land disturber certificate of competence;

- (2) Holds a current certificate of competence from the board in the areas of combined administration, program administration, inspection or plan review:
- (3) Holds a current contractor certificate of competence for erosion and sediment control; or
- (4) Is licensed in state as a professional engineer, architect, certified landscape architect or land surveyor pursuant to article 1 (§ 54.1-400 et seq.) of chapter 4 of title 54.1.

Single-family residence means a noncommercial dwelling that is occupied exclusively by one family.

### Steep slope means a slope greater than 3:1, or 33.3%.

Stabilized means an area that can be expected to withstand normal exposure to atmospheric conditions without incurring erosion damage.

State waters means all waters on the surface and under the ground wholly or partially within or bordering the commonwealth or within its jurisdictions.

*Town* means the incorporated Town of Vinton.

Transporting means any moving of earth materials from one place to another place other than such movement incidental to grading, when such movement results in destroying the vegetative ground cover either by tracking or the buildup of earth materials to the extent that erosion and sedimentation will result from the soil or earth materials over which such transporting occurs.

(Ord. No. 012704-9, § 2, 1-27-04)

\* \* \* \*

# Sec. 8.1-6. Regulated land-disturbing activities; submission and approval of plans; contents of plans.

(a) Except as provided herein, no person shall engage in any land-disturbing activity until he has submitted to the department of community development for the county one (1) of the following for the land-disturbing activity and it has been approved by the plan approving authority. Except as provided herein, no person may engage in any land-disturbing activity until he or she has submitted to the Department of Community Development an erosion and sediment control plan for the land-disturbing activity and such plan has been approved by the plan-approving authority. Where land-disturbing activities involve lands under the jurisdiction of more than one local control program, an erosion and sediment control plan, at the option of the applicant, may be

submitted to the Board for review and approval rather than to each jurisdiction concerned.

- (1) Where the land-disturbing activity results in between two thousand five hundred (2,500) square feet and five thousand (5,000) square feet and/or two hundred fifty (250) to five hundred (500) cubic yards of disturbed area, an "agreement in lieu of a plan" may be substituted for an erosion and sediment control plan if executed by the plan-approving authority.
- (2) Where the land-disturbing activity results in between five thousand (5,000) square feet and ten thousand (10,000) square feet and/or five hundred (500) to seven hundred fifty (750) cubic yards of disturbed area, either a plot plan prepared by a certified responsible land disturber or an engineered plan prepared by a professional engineer showing the erosion and sediment control measures must be submitted and executed by the plan-approving authority. A certified responsible land disturber must be named.
- (3) Where the land-disturbing activity results in ten thousand (10,000) square feet or more and/or seven hundred fifty (750) cubic yards or more of disturbed area, an erosion and sediment control plan must be submitted which has been prepared by a professional engineer. For disturbed areas of less than ten thousand (10,000) square feet, refer to the chart below to determine requirements for the site.

Square Feet	And/Or	Cubic Yards	Requirements
<2,500		0	Exempt from E&S Plan; *building permit plot plan required
2,5005,000		250500	"Agreement in Lieu" of a plan; permit fee; *building permit plot plan required
5,00010,000		500750	Certified RLD, *building permit plot plan by a certified RLD or a P.E.; permit fee
>10,000		>750	RLD, Erosion and sediment control plan prepared by a P.E.; agreement; surety; a *building permit plot plan, if required by the building commissioner

- (b) \*Refer to the Virginia Uniform Statewide Building Code for Building Permit Plot Plan Requirements.
- (c) If lots in a subdivision are sold to another owner, that person is responsible for obtaining a certified responsible land disturber and submitting a plot plan for each lot to obtain an erosion and sediment control permit.
- (d) The standards contained with the "Virginia Erosion and Sediment Control Regulations," and The Virginia Erosion and Sediment Control Handbook and those more stringent local stormwater management criteria which the Board of Supervisors of the County, may adopt by resolution and incorporate into the manual of regulations and

policies entitled "Design and Construction Standards Manual" are to be used by the applicant when making a submittal under the provisions of this chapter and in the preparation of an erosion and sediment control plan. In cases where one standard conflicts with another, the more stringent applies. The plan approving authority, in considering the adequacy of a submitted plan, shall be guided by the same standards, regulations and guidelines. The plan approving authority may waive or modify any of the regulations that are deemed inappropriate or too restrictive for site conditions by granting a variance under the conditions noted in 4VAC50-30-50 of the Virginia Erosion and Sediment Control Regulations.

(e) The plan approving authority shall grant written approval within 45 days of the receipt of the plan, if it is determined that the plan meets the requirements of the local control program, and if the person responsible for carrying out the plan certifies that he or she will properly perform the erosion and sediment control measures included in the plan and will conform to the provisions of this chapter.

When the plan is determined to be inadequate, written notice of disapproval stating the specific reasons for disapproval shall be communicated to the applicant within forty-five (45) days. The notice shall specify the modifications, terms and conditions that will permit approval of the plan. If no action is taken by the plan-approving authority within the time specified above, the plan shall be deemed approved and the person authorized to proceed with the proposed activity.

(f) Responsible land disturber requirement. As a prerequisite to engaging in the land-disturbing activities shown on the approved plan, the person responsible for carrying out the plan shall provide the name of an individual holding a certificate of competence, to the program authority, as provided by section 10.1-561, of the Virginia Erosion and Sediment Control Law, who will be in charge of and responsible for carrying out the land-disturbing activity (the responsible land disturber). Failure to provide the name of an individual holding a certificate of competence prior to engaging in land-disturbing activities may result in revocation of the approval of the plan and the person responsible for carrying out the plan shall be subject to the penalties provided in this chapter.

However, the plan-approving authority may waive the certificate of competence for an "Agreement in Lieu of a Plan" for construction of a single-family residence meeting the requirements in 8.1-3(t)(10) of this chapter. If a violation occurs during the land-disturbing activity, then the person responsible for carrying out the "Agreement in Lieu of a Plan" shall correct the violation and provide the name of an individual holding a certificate of competence, as provided by section 10.1-561 of the Virginia Erosion and Sediment Control Law. Failure to provide the name of an individual holding a certificate of competence shall be a violation of this chapter and may result in penalties provided in this chapter.

(g) An approved plan may be changed by the plan approving authority when:

- (1) The inspection reveals that the plan is inadequate to satisfy applicable regulations; or
- (2) The person responsible for carrying out the plan finds that because of changed circumstances or for other reasons the approved plan cannot be effectively carried out, and proposed amendments to the plan, consistent with the requirements of this chapter, are agreed to by the plan approving authority and the person responsible for carrying out the plan.
- (h) In order to prevent further erosion, the county may require approval of a conservation plan for any land identified in the local program as an erosion impact area.
- (i) When land-disturbing activity will be required of a contractor performing construction work pursuant to a construction contract, the preparation, submission, and approval of an erosion control plan shall be the responsibility of the owner.
- (j) Whenever electric and telephone utility companies or railroad companies undertake any of the activities included in subdivisions (1) and (2) of this subsection, they shall be considered exempt from the provisions of this chapter. Electric, natural gas and telephone utility companies, interstate and intrastate natural gas pipeline companies and railroad companies shall file general erosion and sediment control specifications annually with the Board for review and written comments. The specifications shall apply to:
  - (1) Construction, installation or maintenance of electric transmission, natural gas and telephone utility lines, and pipelines; and
  - (2) Construction of the tracks, rights-of-way, bridges, communication facilities and other related structures and facilities of the railroad company.

The board shall have 60 days in which to approve the specifications. If not action is taken by the board within 60 days, the specifications shall be deemed approved. Individual approval of separate projects within subdivisions (1) and (2) of this subsection is not necessary when approved specifications are followed. Projects not included in subdivisions (1) and (2) of this subsection shall comply with the requirements of the appropriate local erosion and sediment control program. The board shall have the authority to enforce approved specifications. Individual approval of separate projects within subdivisions 1 and 2 of this subsection is not necessary when Board approved specifications are followed, however, projects included in subdivisions 1 and 2 must comply with Board approved specifications. Projects not included in subdivisions 1 and 2 of this subsection shall comply with the requirements of the Roanoke County erosion and sediment control ordinance.

The Board shall have 60 days in which to approve the specifications. If no action is taken by the 9Board within 60 days, the specifications shall be deemed approved. The Board shall have the authority to enforce approved specifications.

- (k) State agency projects are exempt from the provisions of this chapter, pursuant to Code of Virginia, § 10.1-564.
- (I) If the grade of a site is more than thirty-three and one-third (33.3) percent, refer to the International Building Code for steep slope development requirements. (Ord. No. 012704-9, § 2, 1-27-04)
- (m) Cut slopes or fill slopes shall not be greater than 2:1 (horizontal:vertical), unless a geotechnical report is provided for the proposed slopes.
- (n) Cut slopes or fill slopes shall not be greater than 25 vertical feet in height, unless a geotechnical report is provided for the proposed slopes. Cut slopes or fill slopes less than or equal to 3:1 (horizontal:vertical) may exceed 25 vertical feet in height and shall not require a geotechnical report.
- (o) For any cut slopes or fill slopes greater than or equal to 2:1 (horizontal:vertical) and greater than or equal to 25 vertical feet in height, as-built plans showing that the finished geometry is in substantial conformity with the design shall be provided to the plan-approving authority.
- (p) Fill materials, compaction methods and density specifications shall be indicated on the site development plans. Fill areas intended to support structures shall also be indicated on the site development plans. Compaction test results (per VDOT standards) shall be submitted to the plan approving authority.
- (q) Development plans for all new subdivisions shall show proposed lot grades to ensure positive drainage.

## Sec. 8.1-8. Monitoring, reports, and inspections.

- (a) The County may require the person responsible for carrying out the plan and/or the responsible land disturber to monitor and maintain the land-disturbing activity. The responsible land disturber will maintain records of these inspections and maintenance, to ensure compliance with the approved plan and to determine whether the measures required in the plan are effective in controlling erosion and sedimentation.
- (b) The department of community development shall periodically inspect the land-disturbing activity as required under the state program to ensure compliance with the approved plan and to determine whether the measures required in the plan are effective in controlling erosion and sedimentation. The owner, permittee, or person responsible for carrying out the plan shall be given notice of the inspection. If the director of community development or his assignee determines that there is a failure to comply with the plan or if the plan is determined to be inadequate, notice shall be served upon the permittee, person responsible for carrying out the plan or the

responsible land disturber by registered or certified mail to the address specified in the permit application or in the plan certification, or by delivery at the site of the land-disturbing activities to the agent or employee supervising such activities.

The notice shall specify the measures needed to comply with the plan and shall specify the time within which such measures shall be completed. Upon failure to comply within the specified time, the permit may be revoked and the permittee shall be deemed to be in violation of this chapter and, upon conviction, shall be subject to the penalties provided by this chapter.

(c) Upon determination of a violation of this chapter, the Director of Community Development or his assignee may, in conjunction with or subsequent to a notice to comply as specified in this chapter, issue an order requiring that all or part of the land-disturbing activities permitted on the site be stopped until the specified corrective measures have been taken.

If land-disturbing activities have commenced without an approved plan or proper permits, the director of community development or his assignee may, in conjunction with or subsequent to a notice to comply as specified in this chapter, issue an order requiring that all of the land-disturbing and/or construction activities be stopped until an approved plan or any required permits are obtained. Failure to comply will result in civil penalties as outlined in section 8.1-9 of this chapter.

Where the alleged noncompliance is causing or is in imminent danger of causing harmful erosion of lands or sediment deposition in waters within the watersheds of the commonwealth, or where the land-disturbing activities have commenced without an approved plan or any required permits, such an order may be issued without regard to whether the permittee has been issued a notice to comply as specified in this chapter. Otherwise, such an order may be issued only after the permittee has failed to comply with such a notice to comply. The order shall be served in the same manner as a notice to comply, and shall remain in effect for a period of seven (7) days from the date of service pending application by the enforcing authority or permit holder for appropriate relief to the Circuit Court.

If the alleged violator has not obtained an approved plan or any required permits within seven (7) days from the date of service of the order, the Director of Community Development or his assignee may issue an order to the owner requiring that all construction and other work on the site, other than corrective measures, be stopped until an approved plan and any required permits have been obtained. Such an order shall be served upon the owner by registered or certified mail to the address specified in the permit application or the land records of the County.

The owner may appeal the issuance of an order to the Circuit Court of the County. Any person violating or failing, neglecting or refusing to obey an order issued by the director of community development or his assignee may be compelled in a proceeding instituted in the circuit court of the county to obey same and to comply therewith by injunction,

mandamus or other appropriate remedy. Upon completion and approval of corrective action or obtaining an approved plan or any required permits, the order shall immediately be lifted. Nothing in this section shall prevent the director of community development or his assignee from taking any other action authorized by this chapter.

\* \* \* \*

2. That this ordinance shall be in full force and effect from and after November 1, 2006, and that this effective date shall apply to development plans which have been accepted for review by the Community Development Department prior to November 1, 2006; provided said plans in the review process receive final approval by the County within sixty (60) days of November 1, 2006.

On motion of Supervisor Altizer to adopt the ordinance, and carried by the following recorded vote:

AYES: Supervisors McNamara, Church, Altizer, Flora, Wray

NAYS: None

A COPY TESTE:

Diane S. Childers, CMC Clerk to the Board of Supervisors

cc: File

#### Circuit Court

Robert P. Doherty, Jr., Judge James R. Swanson, Judge Steven A. McGraw, Clerk Bonnie Hager, Judicial Secretary Norce Lowe, Secretary

#### Juvenile Domestic Relations District Court

Doris J. Johnson, Clerk (for distribution)

#### General District Court

Vincent A. Lilley, Judge Theresa A. Childress, Clerk (for distribution) Gerald Holt, Sheriff

Paul Mahoney, County Attorney

Randy Leach, Commonwealth Attorney

Chief Magistrate Kozuo Webb

Main Library, Diana Rosapepe

Ray Lavinder, Police Chief

Richard Burch, Chief of Fire & Rescue

Roanoke Law Library, 315 Church Avenue, S.W., Rke 24016

Roanoke County Law Library, Singleton Osterhoudt

Roanoke County Code Book

John M. Chambliss, Jr., Assistant County Administrator

Dan O'Donnell, Assistant County Administrator

Diane D. Hyatt, Chief Financial Officer

Arnold Covey, Director, Community Development

Tarek Moneir, Deputy Director, Development

Philip Thompson, Deputy Director, Planning

Janet Scheid, Chief Planner

Rebecca Owens, Director, Finance

David Davis, Court Services

Elaine Carver, Director, Information Technology

Anne Marie Green, Director, General Services

Thomas S. Haislip, Director, Parks, Recreation & Tourism

William E. Driver Director, Real Estate Valuation

F. Kevin Hutchins, Treasurer

Nancy Horn, Commissioner of Revenue